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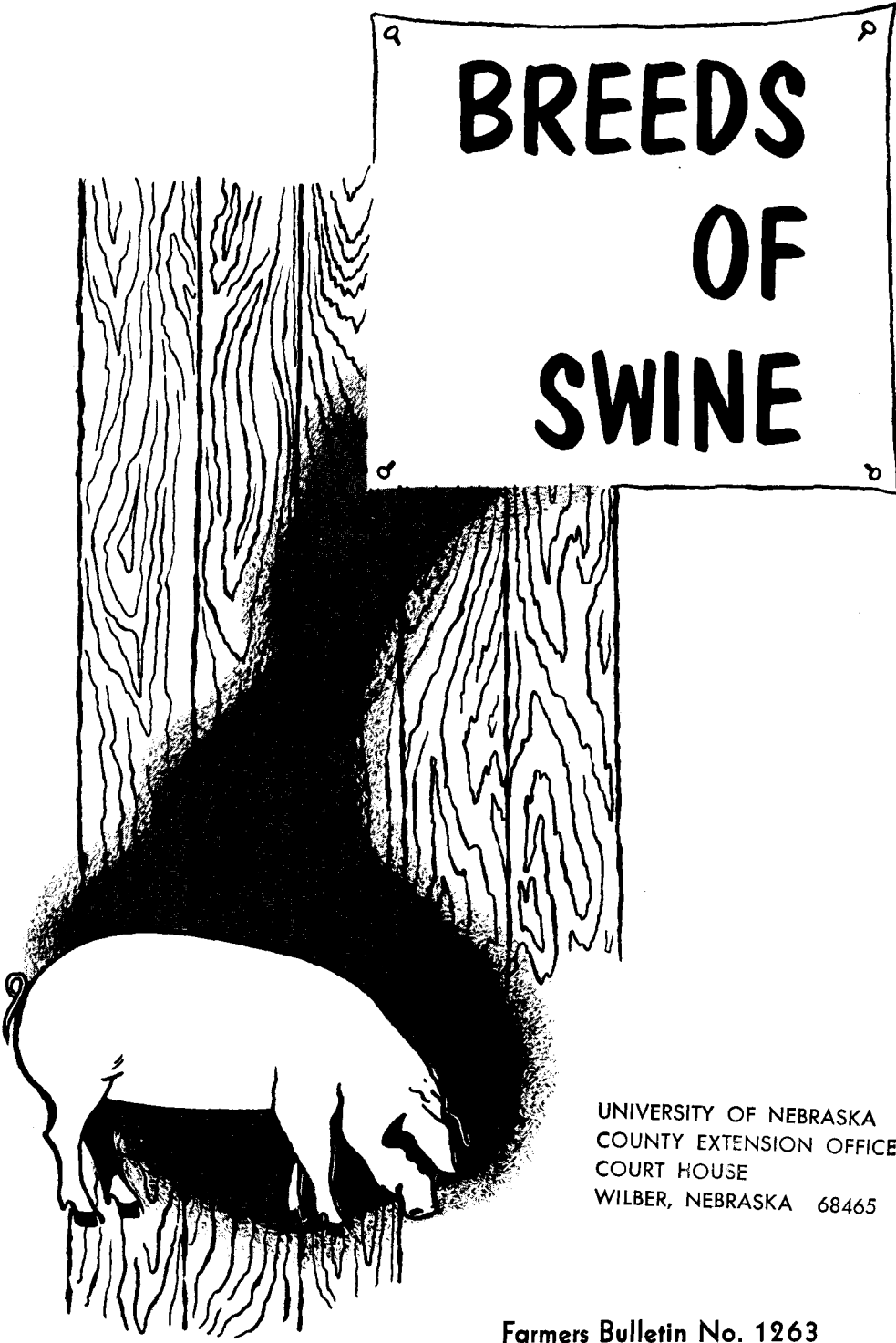
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## BREEDS OF SWINE

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# BREEDS OF SWINE

UNIVERSITY OF NEBRASKA  
COUNTY EXTENSION OFFICE  
COURT HOUSE  
WILBER, NEBRASKA 68465

Farmers Bulletin No. 1263

UNITED STATES DEPARTMENT OF AGRICULTURE

The purpose of this bulletin is to present the most important features of the principal breeds of swine in this country, and the relationship of purebreds to the commercial swine industry. For information regarding the rules of registry and the issuance of herdbooks, or for lists of breeders, write to the individual associations. The officers and addresses of the breed-record associations change from time to time; hence they are not included in this bulletin. But, on request, the Animal Husbandry Research Division, USDA, Beltsville, Md. 20705, will furnish the names and addresses of the secretaries of established associations as last reported.

Although encouraging the development of improved types of swine and other livestock, the United States Department of Agriculture has no jurisdiction over the registration of animals or the operation of the respective associations.

Acknowledgement is made to swine record associations and breeders of purebred hogs, who furnished photographs of animals representative of present-day types.

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# BREEDS of SWINE



## CLASSIFICATION OF SWINE

In the United States hogs were classified as "lard" and "bacon" types for many years. That classification has outlived its usefulness. It seems more appropriate now to classify them as (1) lean- or meat-type and (2) fat-type.

Hogs with enough finish, but no more than necessary, to produce carcasses of desired quality are lean- or meat-type hogs, while those with more finish than necessary are fat-type hogs. Carcasses weighing from 200 to 220 pounds and having a backfat thickness of approximately 1.3 inches are the most desirable. Length desired in such carcasses is about 30 to 31 inches from the aitch bone of the split hams to the breast bone at the first rib. Lighter, shorter hogs may have a little less backfat, and yield carcasses of equal quality. Hogs ranging in live weight from 220 to 250 pounds yield carcasses of desirable quality when the backfat averages 1.5 to 1.8 inches and the length ranges from 30 to 32 inches. Car-

casses from hogs heavier than about 250 pounds produce an excessive amount of lard, and the cuts are large and less suitable to the average consumer than those from lighter weight hogs.

The selection of a breed is largely a matter of personal preference. No one breed is perfect in every respect. Choose a breed of the type and color desired and one that seems to be best suited to the conditions under which the hogs are to be raised.

Individual excellence of animals is important and should be stressed in establishing and maintaining a herd, particularly if the objective is to produce and sell breeding stock. Records on animals should be considered in selecting not only foundation animals but also the replacements in the herd from year to year.

Production registry of breeding stock is sponsored by all the larger swine record associations. These associations can supply information regarding herds having animals that have qualified under the standards used. Then, too, you can ob-

tain much useful information about the performance of the animals from the breeders.

Sow productivity, as measured by size and weight of litter at weaning, and acceptable growth rate of pigs are among the most important factors to consider in selecting breeding stock. Choose meat-type hogs that will produce carcasses of the most desirable quality and weight.

Meat-type hogs of nearly all recognized breeds may attain market

weights of 200 to 220 pounds from 5 months of age up. Mature boars in good condition usually weigh 600 to 900 pounds. Mature sows may weigh 500 to 750 pounds. Hogs of any breed may occasionally reach 1,000 pounds or more.

## OLD BREEDS

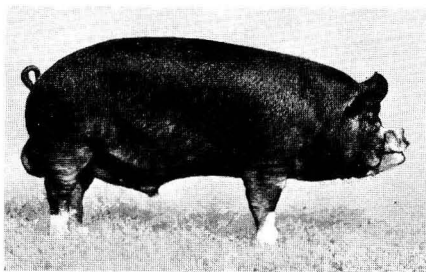
### Berkshire

The Berkshire is one of the oldest of the improved breeds of swine. It was originated and developed in the Shire of Berks, England, and is still raised extensively in that country. Many animals of this breed have been imported into the United States and Canada from England. Mention is made of Berkshire hogs in England and Scotland as early as 1789.

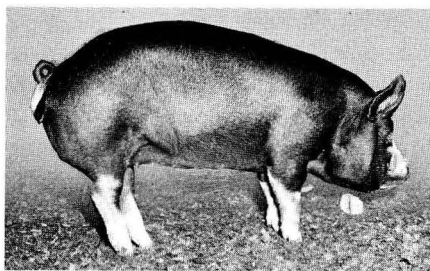
A mature Berkshire hog is of medium size, generally smooth, and of suitable length and depth to produce a carcass of good quality. Its legs are of medium length and have good bone. The Berkshire is a solid hog and usually is free from surplus outside fat. Its meatiness is evident from the outside.

Berkshire hogs are black and have white points on their feet; they usually have a splash of white on their face. The distinctive characteristic is the head; the face is slightly dished and broad between the eyes, the ears are erect. The snout is of medium length. Extreme pug heads are undesirable.

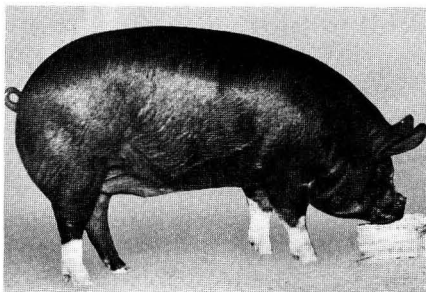
The record association for this breed is the American Berkshire Association.



Berkshire boar



Berkshire gilt



Berkshire barrow

## Chester White

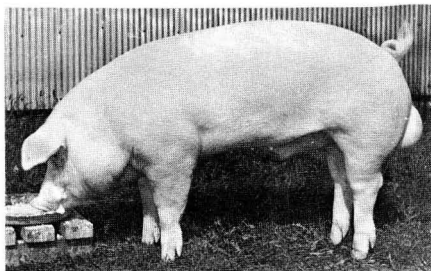
The Chester White breed originated in Chester County, Pa. The large, coarse hogs in Pennsylvania and neighboring States early in the 19th century were a mixture of the Yorkshire, Lincolnshire, and Cheshire, all of which were of English origin. In Pennsylvania these large hogs were crossed with small-type hogs. The most successful cross came through using an imported hog from Bedfordshire, England. The resulting breed was named "Chester County White" in 1848, but the word "County" was soon dropped.

The record association for the breed is the Chester White Swine Record Association.

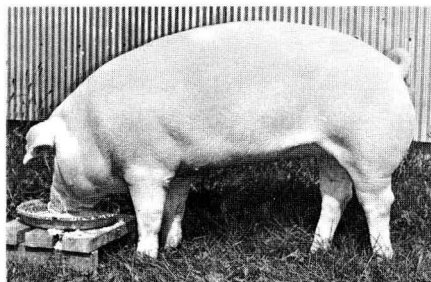
## Duroc

The Duroc breed originated in the northeastern section of the United States from strains of red hogs developed in New York and New Jersey. Those in New Jersey were originally called Jersey Reds; those in New York are said to have been developed by a man who owned the noted stallion, Duroc, and people in that vicinity called the red hogs that this man was breeding Duroc hogs. After several years of independent breeding, these hogs were intermingled and the resulting breed was known as Duroc-Jersey. The word "Jersey" was dropped to avoid confusion with the Jersey breed of cattle. The breed is now known as Duroc.

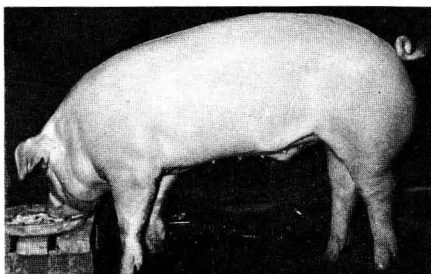
The Duroc breed is red without admixture of any other color. Some of the hogs are dark, others



Chester White boar



Chester White gilt



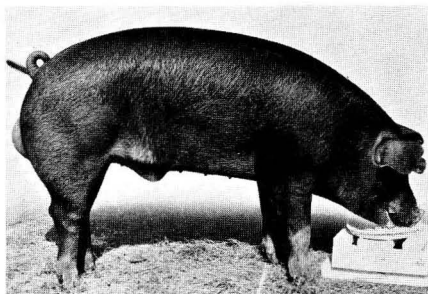
Chester White barrow

are light. The breed is noted for hardiness and prolificacy.

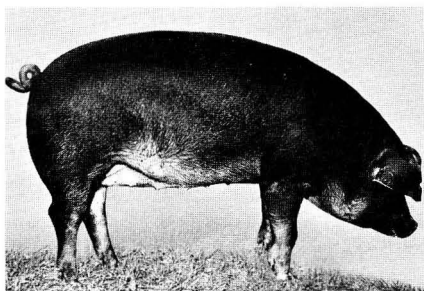
The association for recording hogs of this breed is the United Duroc Swine Registry.

## Hampshire

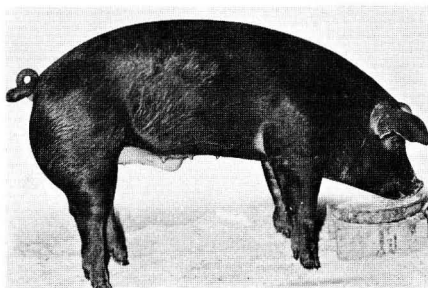
The Hampshire breed originated in Hampshire County, England, and was introduced into the United States during the first half of the



Duroc boar



Duroc gilt



Duroc barrow

19th century. When the Hampshire hog first attracted attention in this country it was referred to as a "thin-rind" hog. The Hampshire has become one of the popular breeds.

The most striking characteristic of the Hampshire is the white belt that encircles its black body. The

white belt includes both forelegs. The width of the belt, according to the Hampshire Swine Registry's standard of perfection, must not exceed two-thirds of the entire length of body. Breeding animals with white hind feet or legs are eligible for registry, provided the white does not extend above the bottom of the ham.

The Hampshire is smooth in general appearance, and its bones are of medium weight. Hampshire hogs are alert and active.

The record association for this breed is the Hampshire Swine Registry.

## Hereford

The Hereford hog, sometimes referred to as the "white-faced" hog, is red; it has white markings much like those on Hereford cattle. The markings are on the head, ears, feet, underline of body, and switch of tail. Hogs offered for registration must have some white on the face and must be at least two-thirds red.

Foundation stock used in the development of this breed was assembled as far back as 1902. It has been reported that hogs of Chester White, Poland China, Duroc, and, possibly, Hampshire breeding were used in the early stages of Hereford development.

The record association for this breed is the National Hereford Hog Record Association.

## Poland China

The Poland China hog originated in Butler and Warren Counties,

Ohio. This breed undoubtedly was derived from the crossing of several breeds. In the 1870's two Ohio farmers—A. C. Moore and D. M. Magie—advertised their hogs extensively and developed a widespread reputation. Their hogs were known as the Moore hogs and the Magie hogs. From these hogs the breed now known as the Poland China was developed. Breeders using the names “Poland” and “Big China” claimed their hogs were a combination of Poland and China blood although no satisfactory evidence was produced to support this claim. The word “Poland” was traced back to an animal obtained from a farmer who was a Polander by birth. Because of common usage, the name Poland China was designated officially in 1872 as the name of the breed.

Poland China hogs usually are black. Many of them are spotted with white.

The three record associations recording purebred Poland China hogs were combined, effective January 1946, into one association, which is known as The Poland China Record Association.

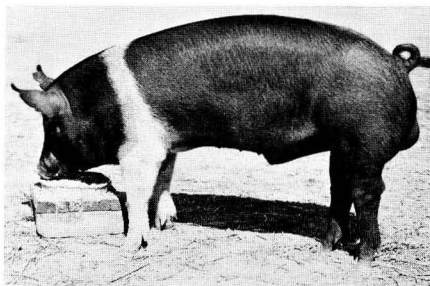
### Spot

The Spot, known as the Spotted Poland China until 1961, resembles the Poland China in body type but is much more white. The appearance is rather that of a black hog with numerous white spots. The standard requirement of the record

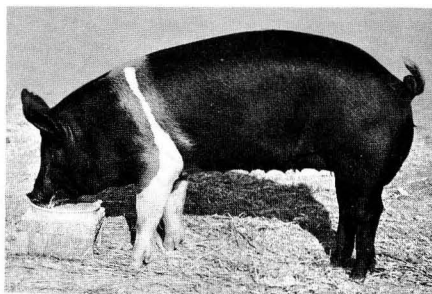
association for the breed is that at least 20 percent of the body be white or black.

Some Gloucester Old Spots, imported from England as foundation animals, have influenced the Spot breed to a considerable extent.

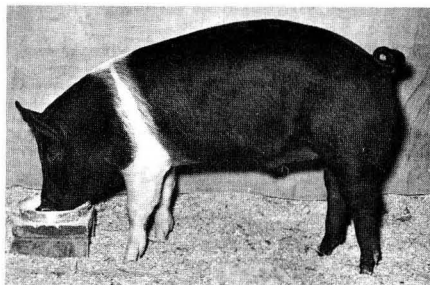
The National Spotted Poland China Record Association was or-



Hampshire boar

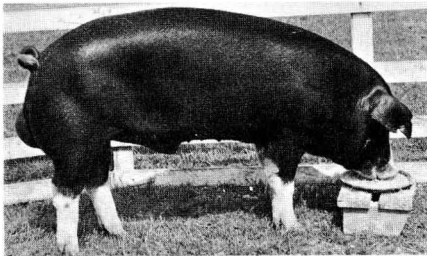


Hampshire gilt

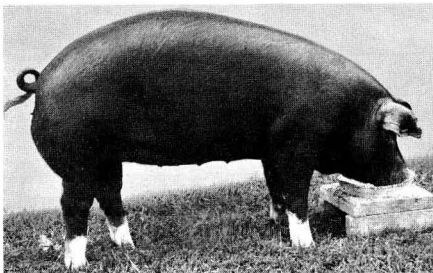


Hampshire barrow

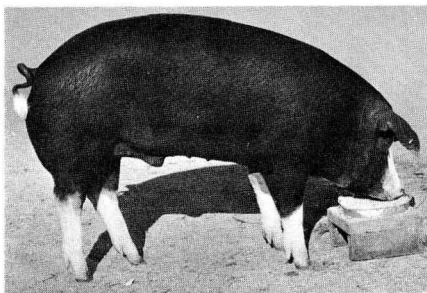




Poland China boar



Poland China gilt



Poland China barrow

ganized January 1, 1914; change of the name to Spotted Swine Record Association became effective in January 1961.

### Tamworth

The Tamworth is one of the oldest of all breeds of hogs; evidence

of pure breeding dates back more than 140 years. The name of the breed is derived from the town of Tamworth, located on the River Tame, in Staffordshire, England. Some hogs of this breed were brought to the United States at least as early as 1881.

The Tamworth hog is red, varying from light to dark; its ears are erect.

The association for recording hogs of this breed is the Tamworth Swine Association, Inc.

### Yorkshire

The Yorkshire breed originated in and around Yorkshire County, England, where it was known as the Large White. In the latter part of the 19th century, the Large Whites were introduced into the United States and Canada, where they were called Yorkshires.

Yorkshire hogs are white, but they occasionally have black spots in the skin. This does not disqualify them, yet it is objectionable from the standpoint of breeders of pure-bred stock.

The American Yorkshire Club is the recording association for this breed.

## NEW BREEDS

### American Landrace

One of the newer breeds of swine in the United States is the American Landrace. American Landrace

hogs are descendants of Danish Landrace hogs that were imported by the U.S. Department of Agriculture in 1934. Some of the foundation animals of this breed carried a trace ( $\frac{1}{16}$  to  $\frac{1}{64}$ ) of Poland China outcross.

Breeders of Landrace hogs in America joined together in 1950 and formed an association to record hogs of the breed.

In 1954, 38 head of boars and gilts of Norwegian, Danish, and Swedish Landrace blood were imported from Norway to instill vigor into the American Landrace.

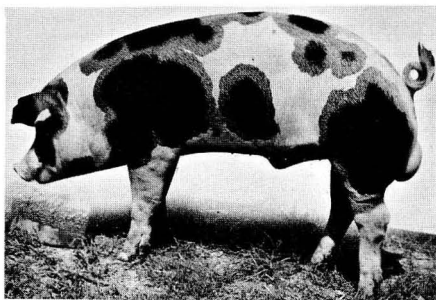
The American Landrace is white, has a good body length (16 or 17 pairs of ribs), and is prolific.

The record association for this breed is the American Landrace Association, Inc.

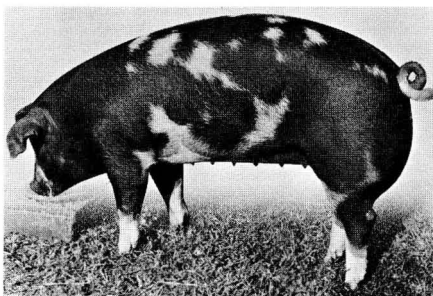
### Inbreds

As a result of swine breeding research at State and Federal experiment stations, a number of inbred lines have been developed from crosses of two or more breeds, and animals of these inbred lines have been purchased by swine breeders. As the number of breeders increased a demand arose for registration of this stock. To meet this need, the Inbred Livestock Registry Association was organized in 1946 by farmers using stock developed at Grand Rapids, Minn. Inbred lines from crossbred foundations admitted for registry in the association have been as follows:

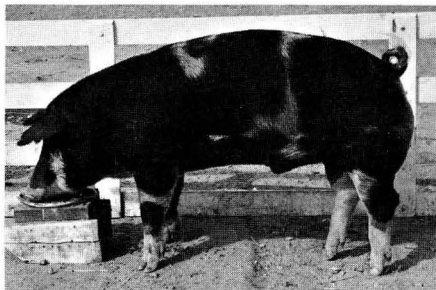
*Minnesota No. 1.*—Minnesota No. 1 originated from Danish Landrace and Tamworth crosses. It was developed by the Minnesota Agricultural Experiment Station in cooperation with the Regional Swine Breeding Laboratory of the U.S.



Spot boar



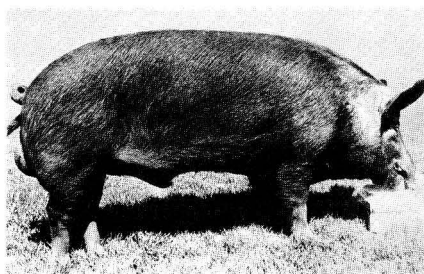
Spot gilt



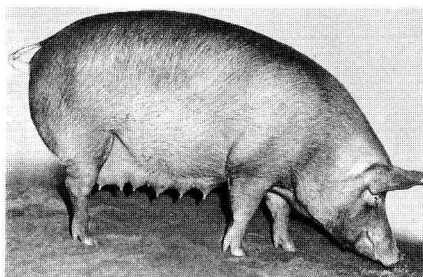
Spot barrow

Department of Agriculture. It was admitted to registry in 1946.

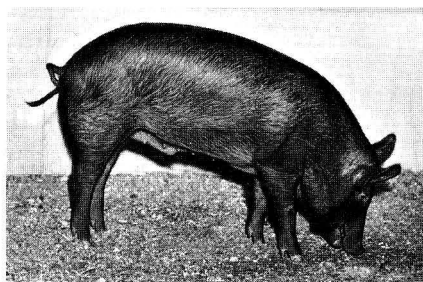
*Minnesota No. 2.*—Minnesota No. 2 originated from Yorkshire and Poland China crosses. It was developed by the Minnesota Agricultural Experiment Station in cooperation with the Regional Swine Breeding Laboratory of the U.S. Department of Agriculture. It was admitted to registry in 1948.



Tamworth boar



Tamworth sow



Tamworth barrow

*Montana No. 1.*—Montana No. 1 originated from Danish Landrace and black (unbelted) Hampshire crosses. It was developed by the U.S. Range Livestock Experiment Station, Miles City, Mont., in cooperation with the Montana Agricultural Experiment Station. It was admitted to registry in 1948.

*Maryland No. 1.*—Maryland No. 1 originated from Landrace-Berkshire crosses. It was developed by the U.S. Department of Agriculture and the Maryland Agricultural Experiment Station at Blakeford Farms, Queenstown, Md. It was admitted to registry in 1951.

*Beltsville No. 1.*—Beltsville No. 1 originated from Landrace-Poland China crosses. It was developed by the U.S. Department of Agriculture at Beltsville, Md. It was admitted to registry in 1951.

*Beltsville No. 2.*—Beltsville No. 2 originated from Danish Yorkshire, Danish Landrace, Duroc, and Hampshire crosses. It was developed by the U.S. Department of Agriculture at Beltsville, Md. It was admitted to registry in 1952.

*San Pierre.*—San Pierre was developed by a private organization in Indiana from Berkshire and Chester White crosses. It was admitted to registry in 1953.

*Minnesota No. 3.*—Minnesota No. 3 originated from a combination of eight breeds—Gloucester Old Spot, Poland China, Welsh, Large White, Beltsville No. 2, Minnesota No. 1, Minnesota No. 2, and San Pierre. It was developed by the Minnesota

Agricultural Experiment Station. It was admitted to registry in 1956.

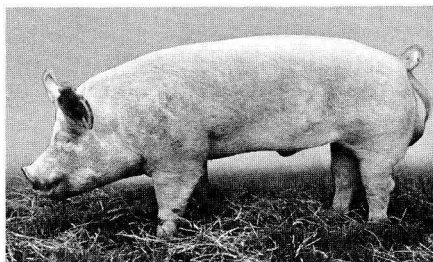
*Palouse*.—Palouse was developed by the Washington Agricultural Experiment Station from Danish Landrace and Chester White crosses. It was admitted to registry in 1956.

## MARKET HOGS

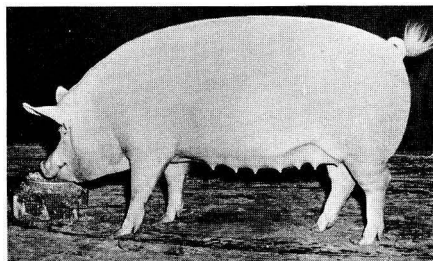
The aim of hog raising is the production of pork for human consumption. Every producer of swine should have as his objective the efficient and economical production of hogs that dress out high-quality carcasses. Consumers demand lean meat of good quality. The amount of fat should not be excessive, but enough to make a firm carcass that handles well in trade channels. The most desirable weights for market hogs are from 180 to 240 pounds; the greater percentage of hogs reaching market under normal conditions weigh between 200 and 225 pounds.

The intermediate-type hog, often referred to as the middle-of-the-road or the meat type, best meets market demands. Intermediate-type hogs usually are superior to the extremes in type that were formerly classified as small and large types.

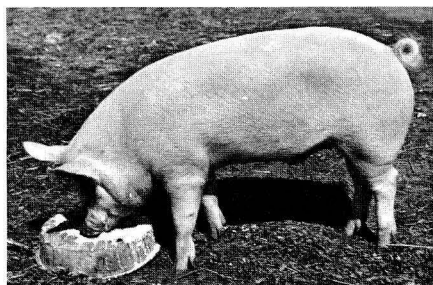
The most desirable meat-type hog is one with a natural tendency to yield a maximum percentage of the highest priced cuts—hams, loins, bacon, picnic shoulders, and shoulder butts—with enough finish to insure firmness. Light finish means



Yorkshire boar



Yorkshire sow



Yorkshire barrow

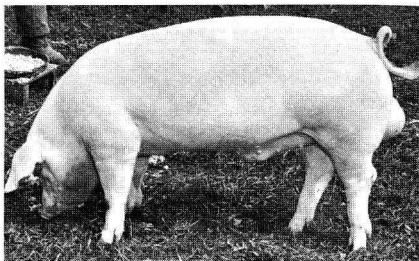
less lard—a product that usually retails for less per pound than the live hog.

No one breed has a monopoly on meat-type hogs. Meat-type hogs can be produced from any of the breeds. Breeders should locate, identify, and certify meat-type hogs rapidly to increase numbers of breeding stock so urgently needed to meet consumer demands.

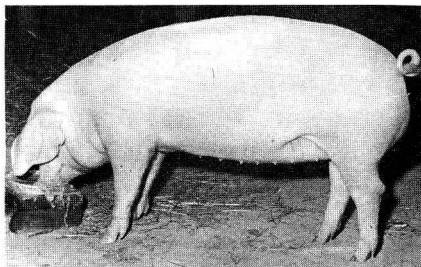
Many commercial producers raise crossbred hogs for the market. Boars should be selected with care in a crossbreeding program. Since half the inheritance of the litters will come from the boar, he should be sound and of a type that can produce the kind of pigs desired. To get the most from hybrid vigor, which is an objective in crossbreeding, mate hogs of completely different ancestry. Rotation of three or four breeds is helpful in maintaining hybrid vigor in a crossbreeding program.

Sources of further information on raising market hogs:

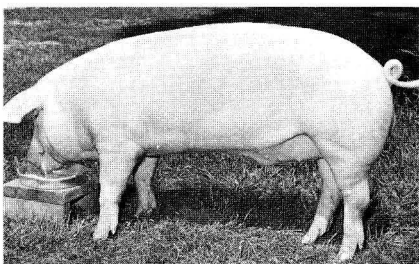
- Farmers' Bulletin 2166, "Swine Production," available from the U.S. Department of Agriculture, Washington, D.C. 20250. Send your request on a post card and include your ZIP code.
- Your county agricultural agent.
- Your State or local swine growers association or swine testing station.
- Swine breed associations.



American Landrace boar



American Landrace gilt



American Landrace barrow

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Washington, D.C.

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